

IN THE CLAIMS:

Amend claims 1, 3, 5, 6, 7 and 10, cancel non-elected claims 11-20 without prejudice or admission, and add new claims 21-24 as shown in the following listing of claims, which replaces all previous listings and versions of claims.

1. (currently amended) A sector drive assembly for a camera, comprising:

a sector unit comprising a base plate having an aperture and one or more sectors for opening and closing the aperture; and

a sector ~~driving~~ drive unit comprising a support plate, an electromagnetic actuator mounted to the support plate, an intermediate member opposed to the support plate and mounted thereto for retaining the electromagnetic actuator in a predetermined position between the opposed support plate and intermediate member, and a drive force transmitting mechanism mounted to the support plate for transmitting a drive force of the electromagnetic actuator to the one or more sectors, the sector drive unit being removably mounted as a unit to the base plate.

2. (previously presented) A sector drive assembly for a camera according to claim 1; wherein the sector unit further comprises a sector urging spring for urging the one or more sectors in one direction.

3. (currently amended) A sector drive assembly for a camera according to claim 1; wherein the sector drive unit further comprises a sector position detecting unit for detecting a position of the one or more sectors based on a position of the drive force transmitting mechanism.

4. (previously presented) A sector drive assembly for a camera according to claim 3; wherein the sector position detecting unit comprises a conductive spring element having a portion that undergoes movement with the drive force transmitting mechanism to come into and out of contact with a conductive member.

5. (currently amended) A sector drive assembly for a camera according to claim 1; wherein the one or more sectors ~~comprise a plurality of sectors each having a sector arm~~ each have sector arms connected thereto, and the sector arms are interconnected to cooperatively drive the one or more sectors to open and close the aperture.

6. (currently amended) A sector drive assembly for a camera according to claim 1; wherein the drive force transmitting mechanism has an angular motion converting mechanism for converting a prescribed amount of angular movement of the electromagnetic actuator into an amount of angular movement of the one or more sectors sufficient to

drive the one or more sectors from one of an aperture-opening position and an aperture-closing position to the other of the aperture-opening position and the aperture-closing position.

7. (currently amended) A sector drive assembly for a camera according to claim 6; wherein the electromagnetic actuator comprises a pulse motor which undergoes the prescribed amount of angular movement in response to application of a prescribed number of voltage or current pulses to the pulse motor for driving the one or more sectors to either the aperture-opening position or the aperture-closing position depending upon the polarity of the pulses.

8. (previously presented) A sector drive assembly for a camera according to claim 7; wherein the pulse motor comprises a rotor having a plurality of magnetic poles, a stator having a plurality of magnetic poles, and a drive coil for driving the rotor, an angle of rotation of the rotor in response to application of a voltage or current pulse to the drive coil being defined by a relationship between positions of the magnetic poles of the rotor and positions of the magnetic poles provided on the stator.

9. (previously presented) A sector drive assembly for a camera according to claim 8; wherein the positions of the magnetic poles provided on the stator are static stable positions at which the rotor is retained without the supply of power to the drive coil.

10. (currently amended) A sector drive assembly for a camera according to claim 6; wherein the drive force transmitting mechanism comprises a drive gear provided on a drive shaft of the electromagnetic actuator and a sector drive gear driven by the drive gear for driving the one or more sectors.

11. - 20. (canceled).

21. (new) A sector drive assembly for a camera according to claim 1; wherein the intermediate member is detachably connected to the support plate.

22. (new) A sector drive assembly for a camera according to claim 21; wherein the support plate has latch devices engageable with the intermediate member to detachably connect the intermediate member to the support plate.

23. (new) A sector drive assembly for a camera according to claim 1; wherein the intermediate member retains both the electromagnetic actuator and the drive force transmitting mechanism in predetermined positions between the support plate and the intermediate member.

24. (new) A sector drive assembly for a camera according to claim 1; wherein the intermediate member has mounting portions removably mountable to the base plate; and further comprising fixing members insertable through the base plate and engageable with respective ones of the mounting portions to removably mount the sector drive unit to the sector unit.